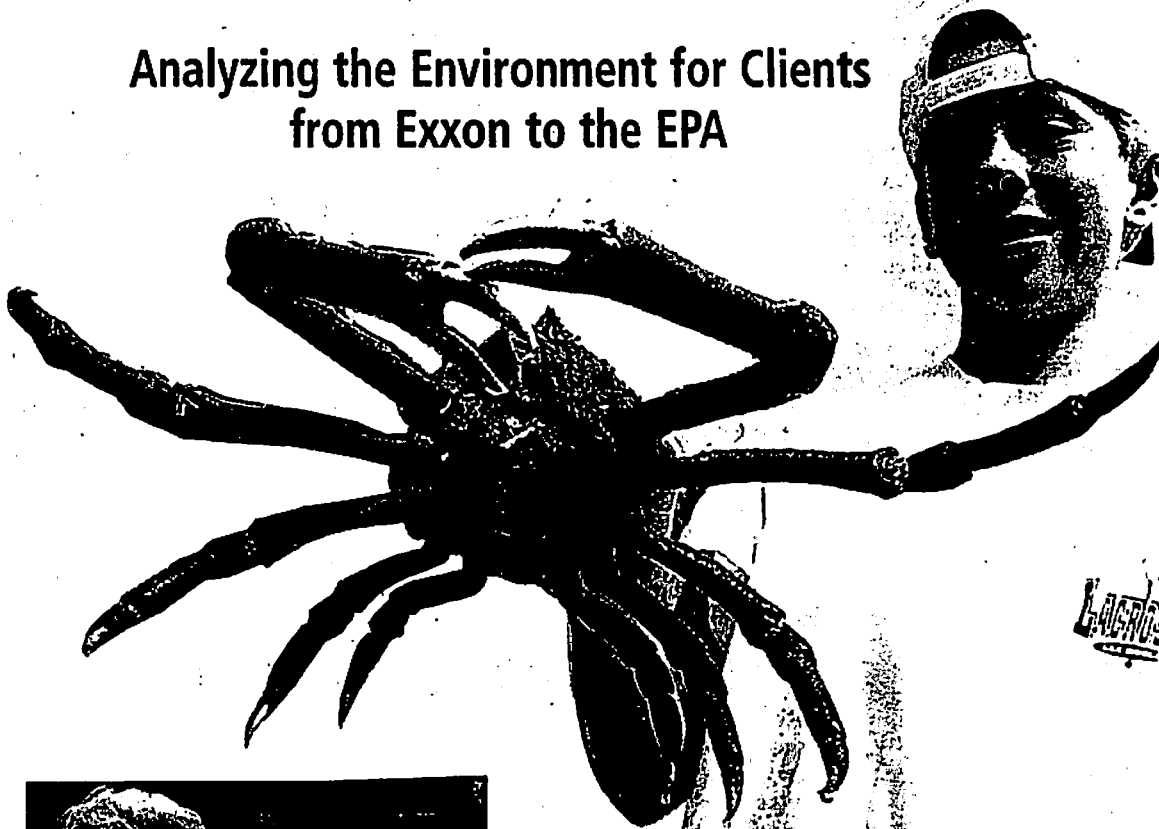


Battelle Ocean Sciences:

Analyzing the Environment for Clients
from Exxon to the EPA



Tripper Sauer, 13,
holds a live spider crab.



Andrew Coonan, 2-1/2, takes a close look at
local marine life.

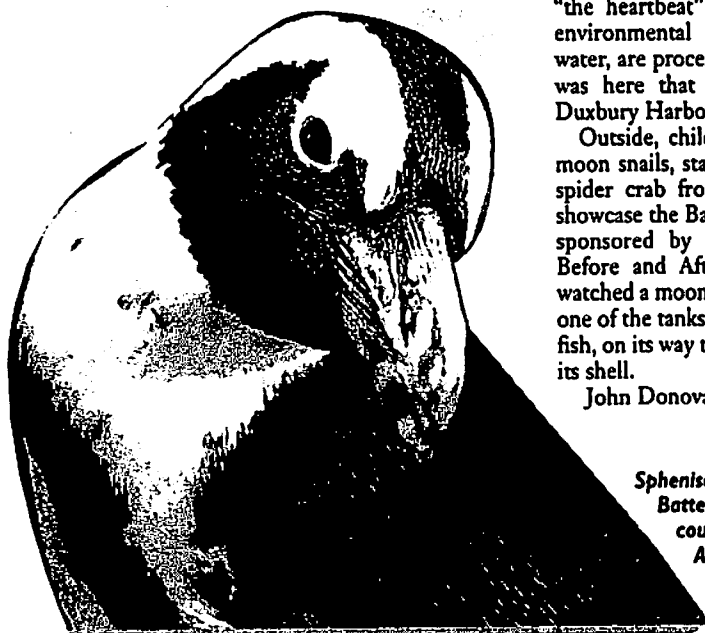
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Duxbury Mariner
Oct 3, 1996

Battelle

By Lesley Mahoney

"In the end, we will conserve only what we love, we will love only what we understand, and we will understand only what we are taught."

— New England Aquarium president Jerry R. Schubel, quoting Senegalese philosopher Baba Dioum



Spheniscus, an African penguin, visits Battelle Ocean Sciences Saturday, courtesy of the New England Aquarium.

Spheniscus, the African penguin, was a big hit at Battelle Ocean Sciences' open house Saturday.

Traveling from the New England Aquarium, Spheny (for short) preened, straightening its feathers in the glass enclosure while dozens of curious eyes looked on. As waves of people in tours passed by, Spheny used its beak to take oil from a gland in its tail. Penguins do this to waterproof their feathers, to keep the water from getting next to their skin.

Spheny was just one draw as Battelle highlighted its environmental expertise and impact through 11 stations, ranging in scope from technical explanation to hands-on learning.

One stop on the tour was the organic chemistry laboratory, which Battelle calls "the heartbeat" of its research lab, where environmental samples, such as fish and water, are processed for chemical analysis. It was here that silt from the dredging of Duxbury Harbor was analyzed.

Outside, children and adults scooped up moon snails, starfish, horseshoe crabs and a spider crab from the tide pool set up to showcase the Backyard Bay Program, jointly sponsored by Battelle and the Duxbury Before and After Dark program. Crowds watched a moon snail feed on a razor clam in one of the tanks; the snail engulfed the shellfish, on its way to eventually sucking it out of its shell.

John Donovan, who teaches fourth grade

at Duxbury Elementary School, initiated the Duxbury Before and After Dark summer program five years ago. As part of the open house, Donovan gave samples of demonstrations and presentations from the program, which is geared to help students appreciate and understand Duxbury's coastal ecosystem.

Nearby, the New England Aquarium set up another tide pool filled with sea creatures.

Inside, Jerry Neff, the senior research leader at Battelle, said Battelle works for both government and industry, thereby maintaining a reputation as an unbiased consultant. Battelle's clients include the Environmental Protection Agency and Exxon.

Neff explained Battelle's role as a technical advisor to Exxon in analyzing the oil from the Exxon Valdez spill. The lab's research arms clients with the knowledge to determine what kind of cleanup is in order for spills. Neff has also acted as a key witness in the trials that ensued from the Valdez spill.

In the next building was the giant circular flume tank used to study oil's behavior in water. Scientists test the combination under varying conditions in the tank, which is equipped to hold 4,000 liters of water. Temperature, wave activity and oil type are all juxtaposed in this small-scale set-up, which provides an index for organizations like the Coast Guard and the Navy to better respond to oil spills. This study of the changes effected when oil and water meet is called weathering. Stanley A. Ostazeski, the principal research scientist at Battelle, explained that Battelle's flume is one of three in the world, and the only one in the United States used to weather oil.

Elsewhere at the open house, the Massachusetts Audubon Society set up a booth where children covered a couple of dead fish with green, blue and purple paint to press onto a sheet of paper, making fish prints. Next to tables laden with information on shore birds, the finished products hung from a clothesline.

Through the open house, Battelle showcased its work while providing space for other organizations to do the same.

Sharing environmental knowledge is a key part of protecting the environment, said the event's keynote speaker, Jerry R. Schubel, president of the New England Aquarium.

Quoting Baba Dioum, a Senegalese philosopher, he said, "In the end, we will conserve only what we love, we will love only what we understand, and we will understand only what we are taught."

He stressed the pertinence of marine conservation, pointing out that within the United States and the world, half of the population lives within 50 miles of the coast. Of the populations predicted to double within the next 50 years, he said, 70 percent will live within 50 miles of the coast.

"It will be remarkable what we'll have to do to safeguard coastal habitats," Schubel said.

He urged the audience to be "good stewards" of the coastal reserves and praised what he called Battelle's enormous environmental impact.

Staff Photos by Chris Bernstein